Thermo Scientific Model 17i

Ammonia Chemiluminescent Gas Analyzer

The Thermo Scientific^m Model 17*i*^m Ammonia Analyzer uses the light producing reaction of nitric oxide (NO) with ozone (O₃) as its basic principle.

Features

- Measurement of NH₃ as well as NO,
- NO₂, NO_x and Nt
- Replaceable NO₂ and NH₃ converter cartridges
- Unparalleled sensitivity and selectivity
- Automatic and manual modes
- Selectable time constants

Introduction

The Thermo Scientific Model 17*i* Ammonia Analyzer uses the light producing reaction of nitric oxide (NO) with ozone (O_3) as its basic principle. The instrument has three modes of operation, NO, NO_x and Nt.

Mode 1: While operating in the NO mode, the sample is mixed with ozone in the reaction chamber. This reaction produces a characteristic luminescence with intensity proportional to the concentration of NO.



Mode 2: In the NO_x mode, the sample is passed through a molybdenum convertor which reduces any NO₂ in the sample to NO. This is then transported to the reaction chamber where the sample is measured as NO_x (NO + NO₂).

Mode 3: In the third mode, the Nt sample is passed through a stainless steel convertor where both the NO_2 and the NH_3 are converted to NO. This is then measured as Nt (NO + NO_2 + NH_3).



Thermo Scientific[™] Model 17*i* Ammonia Analyzer

The software subtracts NO from NO_x and NO_x from Nt and provides outputs of NO_2 and NH^3 respectively. The Model 17*i* analyzer can output NH^3 along with NO, NO_2 , NO_x , and Nt to the display or electronic outputs.

This state-of-the-art *i*Series gas analyzer also features:

- Ethernet port
- Flash memory for increased data storage
- Ethernet connectivity for remote access
- Off-site measurement downloads
- Easily programmable short-cut keys
- A large interface screen



thermo scientific

Thermo Scientific Model 17i Ammonia Analyzer

Specifications				
Preset ranges	0-0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, and 20 ppm 0-0.1, 0.2, 0.5, 1, 2, 5, 10, 20, and 30 mg/m³			
Extended ranges	0-0.2, 0.5, 1, 2, 5, 10, 20, 50, and 100 ppm 0-0.5, 1, 2, 5, 10, 20, 50, 100, and 150 mg/m ³			
Custom ranges	0-0.05 to 100 ppm 0-0.1 to 150 mg/m ³			
Zero noise	0.50 ppb RMS (120 second averaging time)			
Lower detectable limit	1.0 ppb (120 second averaging time)			
Zero drift (24 hour)	< 1 ppb			
Span drift (24 hour)	+/-1% full scale			
Response time	120 seconds (10 second averaging time)			
Precision	+/-0.4 ppb (500 ppb range)			
Linearity	+/-1% full scale			
Sample flow rate	0.6 liters/min.			
Operating temperature	59° - 95° F (15° - 35°C)			
Power requirements	100 vac, 115 vac, 220-240 vac +/-10% @ 50/60hz, 300W (analyzer) 600W (converter)			
Size and weight	16.75" (W) × 8.62" (H) × 23" (D), 60 lbs. (28 kg) Analyzer: 29 lbs. (14 kg) converter			
Outputs	Selectable voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication (standard). 0-20 or 4-20 mA Isolated Current Output (optional)			
Inputs	16 Digital inputs (standard), 8 0-10Vdc analog inputs (optional)			
Available Options	Tefl on particulate filter, ozone particulate filter, rack mounts, rear extender			

Ordering information Model 17*i* Ammonia Analyzer

Choose from the following configurations/ options to customize your own Model 17*i* Ammonia Analyzer

-	Ammonia Analyzer		
	1. Voltage options		
	A = 115 Vac 60 Hz (standard)		
	B = 220 Vac 50 Hz		
	C = 220 Vac 60 Hz		
	E = 115 Vac 50 Hz		
	J = 100 Vac 50/60 Hz		
	2. Internal zero/span		
	N = No zero/span assembly (standard)		
	Z = Internal zero span assembly		
	3 = 20 LPM Compressor		
	3. Ozone handling		
_	D = Drierite scrubber (standard)		
	P = Permeation dryer		
	4. Optional I/O		
_	A = None (standard)		
	C = I/O expansion board (4-20mA outputs- 6 channels 0-10v inputs-8 channels)		

Your Order Code: Model 17*i* Ammonia Analyzer

USA 27 Forge Parkway Franklin, MA 02038 Ph: (866) 282-0430 Fax: (508) 520-1460 customerservice.agi@thermofisher.com India

India C/327, TTC Industrial Area MIDC Pawane New Mumbai 400 705, India Ph: +91 22 4157 8800 india@thermofisher.com China Beijing Silver Tower, #2 DongSanHuan North Rd, Beijing, China, 100020 +86 10 84193588 info.eid.china@thermofisher.com Europe Takkebijsters 1 Breda Netherlands 4801EB +31 765795641 info.aq.breda@thermofisher.com

Find out more at thermofisher.com/17iEPM



© 2021 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. EPM_17iEPM_1121